

REMARKS

Further reconsideration is respectfully requested. No claim is amended herein.

Applicant requests that the following be considered further in reply to the Advisory Action of September 20, 2010.

Careful study of the Examiner's advises given in the Advisory Action led the Applicant to conclusion that he has arguments to convince the Examiner and he respectfully asks to return to consideration of his application taking into account the following cases.

The doubts about applied device being related to the same class as the presented RNG samples (Kim, US 6,829,628; Hars, US 7,356,552; Sun, US 7,526,027) may be dissuaded by the following proofs:

There are no official definition for RNG published anywhere in the world including the USA, particularly by USPTO, imposing restrictions on the nature of the stochastic processes to be used in RNG. There are no official document stating that these processes must not be man made and must have exactly electromagnetic nature. According to Applicant's analysis of actually published definitions of RNG the only acknowledged requirements for RNG are to generate the authentic random numbers and provide them to the customers. Since the applied device meets these requirements, although it uses the natural (non man made)

stochastic process of non electromagnetic nature, it is a genuine RNG and belongs to the same class as the presented RNG samples. Reduction of all RNGs to the devices using only man made processes of electromagnetic nature seems to be obviously incorrect. Such approach would exclude from the RNG class the classical example of RNG beloved by most textbooks on the theory of probabilities: dice.

The process proposed to be used in the applied device is authentically stochastic. This point had been proven by multiple research programs carried out by NASA, ESA and other space agencies. The results of these researches may be found on the official sites of these agencies. Among other information there are presented the exact data on probabilities of micro particles (meteorites and space waste) collisions with objects of predetermined shape on predetermined orbits around Earth. So denial of the authentically stochastic character of the micro particles move seems to be incorrect. It would undermine even the rationale of respectful international organizations dealing with this phenomenon in accordance with the international agreements.

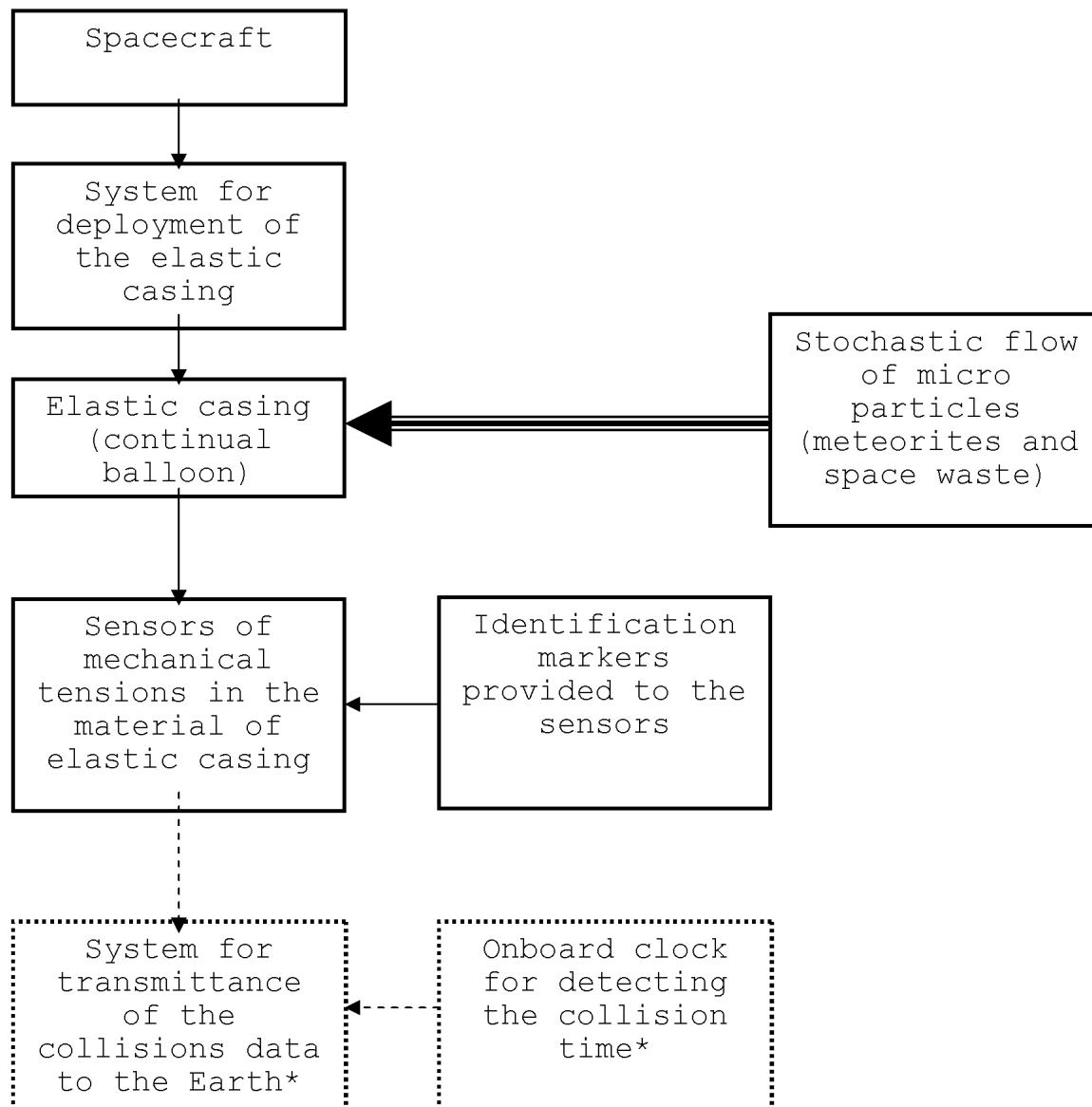
The structure of the applied device secures the use of the stochastic move of the micro particles for generation of the authentically random numbers. To reach this goal it has been proposed to launch a spacecraft on the orbit around the Earth where stochastic characteristics of the micro particles move correspond to the requirements of the space game. Onboard the

spacecraft there has been proposed to deploy the isolated gaming fields provided with identification markers and sensors of collisions. Since distribution of micro particles in space and time has authentically stochastic character the collisions of them with gaming fields will also have the authentically stochastic character. Each collision will lead to actuation (or, as fairly noted the Examiner, to being active) of sensor, allowing, along with onboard clock, to form a complex number consisting of exact time of collision and identification number of the gaming field. Since the collisions have authentically stochastic character, the formed numbers will have the authentically stochastic character too.

The structure of the applied invention secures the provision of the generated random numbers to the customers for playing a space game. To reach this goal it has been proposed to use special systems: system for enciphering of random numbers (to protect from interception); system for transmittance of the enciphered random numbers to the Earth; ground system for deciphering of signal from the spacecraft and further provision of the random numbers to the players.

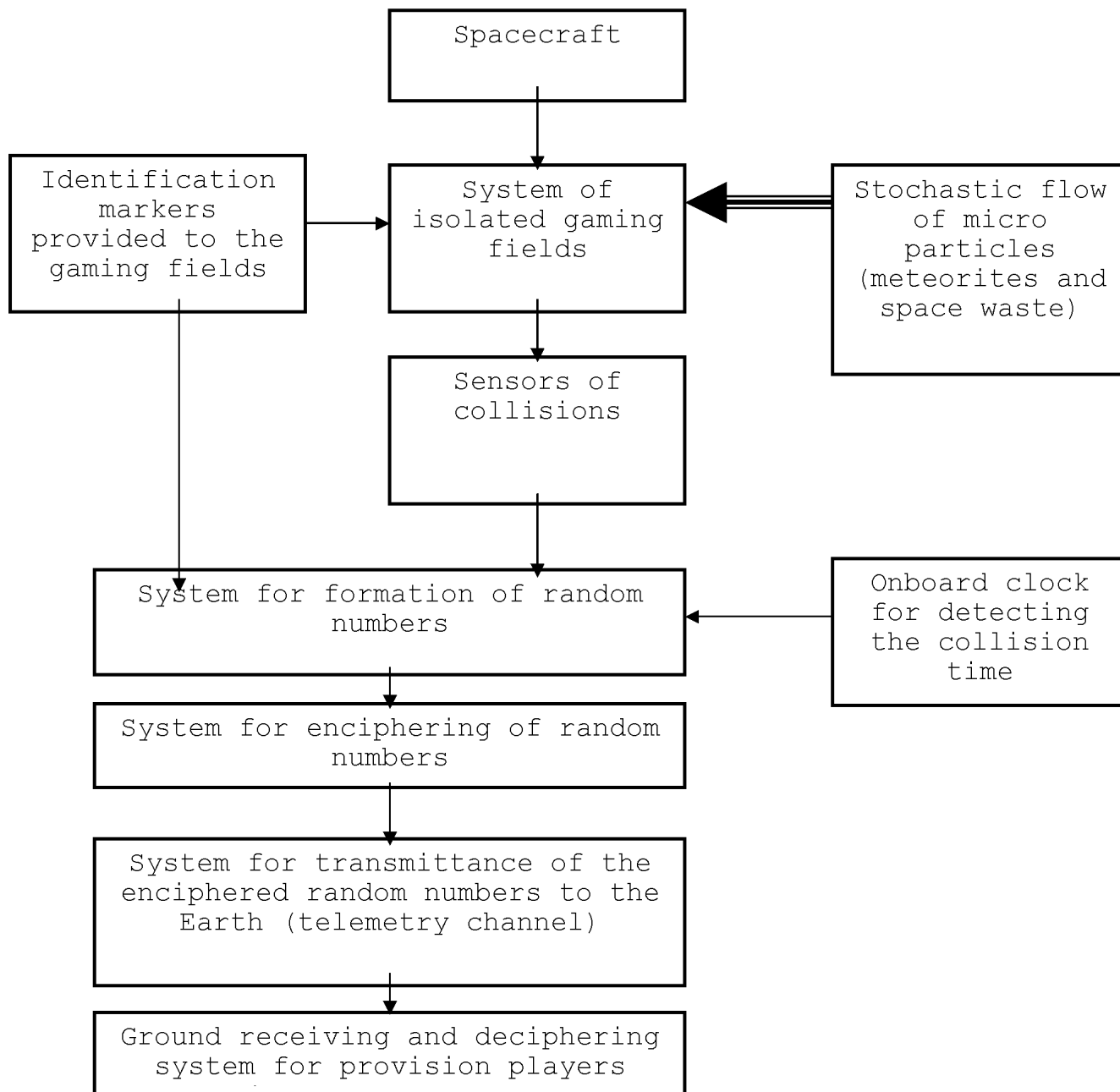
The Applicant respectfully disagrees with assertion of the Examiner that the applied device does not differ from device by Kitazawa by structure. To prove his point the Applicant proposes to compare the actual structures of the devices.

Picture 1. The structure of the device by Kitazawa



\* Actually this system is absent in the description by Kitazawa but it can be imagined according to the Examiner. Nevertheless it is probable that Kitazawa meant some sort of storage of the data onboard the spacecraft without any means for immediate transmittance to Earth.

Picture 2. Structure of the applied device



It is clear that these are two absolutely different structures. Even accepting a possibility to imagine some additional systems according to the Examiner, it is incorrect to

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deny that the devise by Kitazawa uses continual elastic casing (any collision with micro particle leads to concussion of all the balloon) instead of isolated gaming fields, that identification markers are provided to sensors (which makes impossible to precisely localize a collision) instead of gaming fields, that there is no system for formation of random numbers, no system for enciphering of random numbers, no ground receiving and deciphering system for provision players with random numbers. The Applicant would like to note that these differences are not accidental: the device by Kitazawa had not been designed as a gaming RNG.

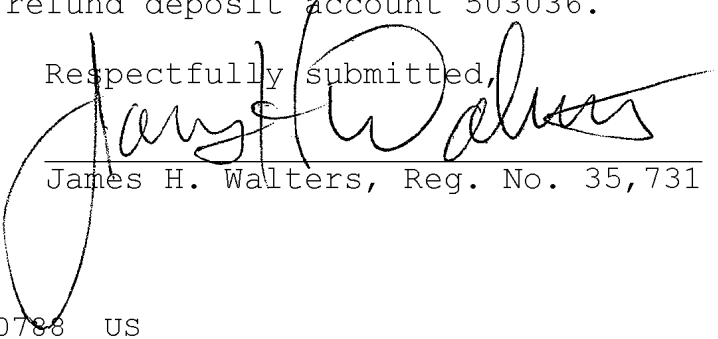
Additionally the Applicant would like to note that assertion of the Examiner that "The space waste moving outside the Earth is not man made" is not thoroughly correct because it actually is a man made phenomenon. Space waste consists of micro particles formed by broken spacecraft and space launchers being an undesirable outcome of the space flights. Nevertheless the flows of space waste as well as flows of micrometeorites have authentically stochastic character.

The Applicant asks the Examiner to take into account the presented arguments and reconsider his attitude to the applied invention.

The Examiner is asked to contact applicant's attorney at 503-224-0115 if there are any questions.

It is believed that no fees are due with this filing.  
However, if it is determined that fees are required to keep the  
application pending, please charge deposit account 503036. If a  
refund is owed, please refund deposit account 503036.

Respectfully submitted,

  
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